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=> d full his

     (FILE 'HOME' ENTERED AT 14:42:07 ON 27 FEB 2002)

     FILE 'REGISTRY' ENTERED AT 14:43:23 ON 27 FEB 2002
L1             1 SEA ABB=ON  PLU=ON  PHOSPHORIBOSYL PYROPHOSPHATE AMIDOTRANSFERA
                 SE/CN
                 D

     FILE 'HCAPLUS' ENTERED AT 14:44:08 ON 27 FEB 2002

     FILE 'REGISTRY' ENTERED AT 14:44:14 ON 27 FEB 2002
                 SET SMARTSELECT ON
L2               SEL PLU=ON  L1 1- CHEM :      16 TERMS
                 SET SMARTSELECT OFF

     FILE 'HCAPLUS' ENTERED AT 14:44:16 ON 27 FEB 2002
L3           465 SEA ABB=ON  PLU=ON  L2
L4         93866 SEA ABB=ON  PLU=ON  S ESCHERICHIA COLI OR E# COLI OR PARACOLOBA
                 CTRUM COLIFORME
L5          4235 SEA ABB=ON  PLU=ON  S PURINE NUCLEOSIDE# OR (NUCLEOSIDES (L)
                 PURINE) OR PURINE RIBONUCLEOSIDE#
L6             1 SEA ABB=ON  PLU=ON  L3 (L) L4 (L) L5
                 D IBIB AB HIT
L7            96 SEA ABB=ON  PLU=ON  L4 (L) L5
L8            81 SEA ABB=ON  PLU=ON  L7 AND PD<19970718
L9            15 SEA ABB=ON  PLU=ON  L8 AND PREP/RL
                 D IBIB AB 1
                 E FERMENTATION/CT
                 E E3+ALL
L10            1 SEA ABB=ON  PLU=ON  L9 AND FERMENT?
                 D IBIB AB HIT
L*** DEL       0 S L8 AND FERMET?
L11            2 SEA ABB=ON  PLU=ON  L8 AND FERMENT?
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> d ibib ab hit

L6 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:256978 HCAPLUS
DOCUMENT NUMBER: 135:32777
TITLE: Investigation of various genotype characteristics for inosine accumulation in Escherichia coli W3110
AUTHOR(S): Matsui, Hiroshi; Kawasaki, Hisashi; Shimaoka, Megumi; Kurahashi, Osamu
CORPORATE SOURCE: Fermentation & Biotechnology Laboratories, Ajinomoto Co., Inc., Kanagawa, 210-8681, Japan
SOURCE: Biosci., Biotechnol., Biochem. (2001), 65(3), 570-578
CODEN: BBBIEJ; ISSN: 0916-8451
PUBLISHER: Japan Society for Bioscience, Biotechnology, and Agrochemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB For the derivation of an inosine-overproducing strain from the wild type microorganism, it is known that the addn. of an adenine requirement, removal of **purine** nucleoside hydrolyzing activity, removal of the feedback inhibition, and repression of key enzymes in the **purine** nucleotides biosynthetic pathway are essential. Thus, the disruption of purA (adenine requirement), deoD (removal of **purine nucleosides** phosphorylase activity), purR (derepression of the regulation of **purine** nucleotides biosynthetic pathway), and the insensitivity of the feedback inhibition of phosphoribosylpyrophosphate (**PRPP**) **amidotransferase** by AMP and GMP were done in the **E. coli** strain W3110, and then inosine productivity was estd. In the case of using a plasmid harboring the **PRPP amidotransferase** gene (purF) that encoded a desensitized **PRPP amidotransferase**, purF disrupted mutants were used as the host strains. The innovation of the 4 genotypes brought about a small amt. of inosine accumulation. An adenine auxotrophic mutant of **E. coli** showed inappropriate adenine use because its growth could not respond efficiently to the concn. of adenine added. As the presence of adenosine deaminase is well known in **E. coli** and it is thought to be involved in adenine use, a mutant disrupted adenosine deaminase gene (add) was constructed and tested. The mutant, which is deficient in purF, purA, deoD, purR, and add genes, and harboring the desensitized purF as a plasmid, accumulated about 1 g of inosine per L. Although we investigated the effects of purR disruption and purF gene improvement, unexpectedly an increase in the inosine productivity could not be found with this mutant.
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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=> d ibib ab hit 1

L11 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:630517 HCAPLUS
DOCUMENT NUMBER: 115:230517
TITLE: 2',3'-Dideoxypruine nucleoside virucides microbial manufacture
INVENTOR(S): Kojima, Eiji; Ishida, Shuji; Yoshioka, Hidetoshi; Murakami, Kunimutsu
PATENT ASSIGNEE(S): Sanyo-Kokusaku Pulp Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03047086	A2	19910228	JP 1989-181885	19890714 <--

AB 2',3'-Dideoxypurine **nucleosides** (Markush structure given) are manufd. from **purine** analogs (Markush structure given) and 2',3'-dideoxycytidine or 2',3'-dideoxyuridine or 3'-deoxythymidine in the presence of phosphates with an immobilized microorganism, e.g. Escherichia coli. The method can be used from com. prepn. of 2',3'-dideoxypurine nucleotides; the cost is low; the immobilized microorganism can be easily regenerated; and the products can be easily recovered. **E. coli** JA-300 was immobilized on .kappa.-carrageenan by a known method to obtain beads of immobilized **E. coli** JA-300. Prepn. of 2',3'-dideoxypurine **nucleosides** from 2'-3'-dideoxyuridine and various **purine** analogs using the immobilized **E. coli** JA-300 at 45.degree. with agitation was shown. The yield was 27-70%.

PI JP 03047086 A2 **19910228** Heisei

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IT **Fermentation**
(dideoxypurine nucleosides, with immobilized microorganism as virucides at com. amt.)

=> d ibib ab hit 2

L11 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1959:123119 HCAPLUS
DOCUMENT NUMBER: 53:123119
ORIGINAL REFERENCE NO.: 53:22204d-f
TITLE: Permeability of Escherichia coli to ribose and ribose nucleotides
AUTHOR(S): Eggleston, L. V.; Krebs, H. A.
CORPORATE SOURCE: Univ. Oxford, UK
SOURCE: Biochem. J. (**1959**), 73, 264-70
DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Washed intact cells of **E. coli** NCIB 8571, grown semi-anaerobically in a glucose medium, are able to degrade anaerobically D-ribose added in the form of **purine** and pyrimidine nucleotides or **nucleosides**. The products formed include CO2, H, EtOH, AcOH, and succinic acid. Free ribose and ribose 5-phosphate are not degraded by intact cells grown in glucose medium, but are **fermented** by disintegrated cell material obtained by supersonic vibration. Intact cells grown in a medium contg. ribose instead of glucose rapidly **ferment** ribose and ribose 5-phosphate, as well as the ribose moiety of **purine** and pyrimidine nucleotides. Washed cells grown in a glucose medium acquire the ability to **ferment** ribose if they are incubated for a few hours in the presence of O, ribose, and a source of N. The observations are in accord with the assumption that the penetration of ribose and ribose 5-phosphate into the cell is mediated by a specific permease. Washed cells also acquire the ability to **ferment** ribose 5- phosphate (but not ribose) when treated with cetyltrimethylammonium. bromide or lysozyme plus ethylenediamine-tetraacetic acid. These agents presumably cause structural modifications in the cell wall.

SO Biochem. J. (**1959**), 73, 264-70

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